

GGGGGGGGGGGGGTCAGAGGGAGCTTCTTTAGGCCGTCCATCTGTGAAT
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 CTTGTTCTCTGCCTCTGGGAAGGCAGACCTATGTGTGGATGGCTGCCAGAG
 TCAGGGCTCTTATCCTTCCTCTAGAAAGGGTCGCAGAGATCTCACG
 TGGCCAACCACGAGGAGGCAGAACAGACAGCCGGATCTGTTGTGCCGTGCCA
 CACCTCATGGGCACCAGCCTGGCTGGGAAGGCCAGAGGCAGAGAGGGAAAGAT
 GCTGTCCAGGCTTGGAAAGATTCTGGAAGAAACCTGAGACCGAATTTACCCCC
 CAAGGGATGTGAAAGCGATCATGTCATCAGGGATGCAGGCCGTGACTCAG
 CCAGCAGATGGGAGGAAAGTGGAGAGATCACCTCTACAGGAGGAAGCCAAGAG
 GTTCTGGCATCGGTTATGTCAGAAAGGGCCGGCTTCCAGGGAGTCATCC
 TGCCCATCAAAAGCCACGAAGTACACTGGGAGACCTGCAGGACTGTGCCCTC
 AACCAGACCATTGCCATGAAGACTGTCAAAAAGTCGTTGTCCAGAACAAACCT
 TTGCTTGGCAAATGCAGTTCCATTGTTCCGGAGAAGGGCAGATGCC
 ACAGCTCTGCTCCCCTGCTCGCCACCAAATTCAACCACCGTGCACTTGATG
 CTGAAC TGCA ACCAGCC AACCCCGTGGTCAAGATGGT GATGCAAGT AGAAGA
 GTGTCAGTGCATGGTGAAGACGGAACGTGGAGAGGAGCGCCTCTACTGGCTG
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 ATTACCTCAACAGAAAGCAAAACCTCAACAGAATAAGTGGGTTATTCAATC
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 CTCTCTCTCTCTCTCACACACACACACACACACACACACACACACAT
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 GTGGCTGGGATGATTAAACTCCTGATCCAATTCTGAGTGCTGGGATTAC
 AGACATGCTCCATAANACATAGCTCCAGAAGGATTTAAAAGAGATTTGC
 ATGTTCAAAGTTGCCTTGAGACTCAGAAATTTTGATNTATTGAATGGCC
 TTGCCACAGATGTGGGAGGCAGTTGCTGGTGGCCAAAGTATTGTTTG
 TTCGTTCAGAATTCTCACATGAAGTTTACTGTTGGTTATCTGGCGTTGAA
 GAAGGAATAGTGAAGGTACTTTAACAGTTACACGTGGAAGGGCTCAGGCA
 CTAGGAACCAACCTTCCCGGAATATGAGGAAAATACATGAACAGTATTAGA
 GTCACTTGAGGAAGTTACTAGGAAACGCCATAAGTCTCCAAGTACATTGTGAG
 TCATTTGAAGGACAATCGTGTATATAGACGAAATCTTACTCGTATGCTT
 TGAATCTCTAGCAAGTTAGGTTCTATGTTGGCTTCTCCTATTGTCTAA
 GAGTATGTGTGACAAATTCAACCTGACAAATACCTCAATGGCAAATTCTGACC
 CTG (SEQ ID NO: 2)

MHLLLVQLLVLLPLGKADLCVDGCQSQGSLSFPLLERGRRLDHVANHEEAEDK
 PDLFVAVPHLMGTSLAGEGQRQRGKMLSRLGRFWKKPETEFYPPRDVESDHVS
 SGMQAVTQPADGRKVERSPLQEEAKRFWHRFMFRKGPAFQGVILPIKSHEVHW
 ETCRTVPFNQTIAHEDCQKVVVQNNLCFGKCSSIRFPGEGADAHSFCSHCSPT
 KFTTVHLMLNCTSPTPVVKMVMQVEECQCMVKTERGEERLLLQGSFIPGL
 PASKTNP (SEQ ID NO: 2)

FIGURE 1

Construct

Gene:

67

GI Number(s): 6753409

Gene Family:

Growth Factor Inhibitor

Gene

Subfamily: Cerberus

Gene Sequence: full-length cDNA, Mouse

underlined = deleted in targeting construct

[] = sequence flanking Neo insert in targeting construct

```

[GGGGGGGGGGGGGGTCAGAGGGAGCTTCTTTAGGCCGTCATCTGTGAATCTAACCC
TCAGTTCTGGGAATCAGGAAGCATGCATCTCCTCTAGTTAGCTGCTTGTTCTCTTG
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CCTCCTAGAAAGGGCTGCCAGAGATCTCCACGTGGCAACCACAGGAGGGCAGAAGACAA
]GCGGGATCTGTTGTGGCGTGCACACCTCATGGCACCCAGCCTGGCTGGGAAGGCC
AGAGGCAGAGAGGGAAAGATGCTGTCAGGCTTGAAGATTCTGGAAGAAAACCTGAGACCG
AATTTCACCCCCAAGGGATGTGAAAGCGATCATGTCATCGGGGATGCAGGCCGTGA
CTCAGCCAGCATGGGAGGAAGTGGAGAGATCACCTCTACAGGAGGAAGCCAAGAGGT
TCTGGCATCGGTTCATGTTAGAAAGGGCCCGTCCAGGGAGTCAT [CCTGCCATC
AAAAGCCACGAAGTACACTGGGAGACCTGCAGGACTGTGCCCTCAACCAAG] ACCATTGC
CCATGAAGACTGTCAAAAAGTCGTGTCAGAACACCTTGCCTTGGCAAATGCAGTTC
CATTGTTTCCCGAGAAGGGCAGATGCCACAGCTCTGCTCCCCTGCTGCCAC
CAAATTCAACCACCGTGCACCTGATGCTGAACCTGCACCAGCCAAACCCCGTGGTCAAGAT
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CCTCTCTCTCTCTCTCTATTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT
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GTATTCTCGCTGGCTCAAACATCACAATGTTGAGTGGATGATTTAACTCTGATCC
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TTTCCCGGAATATGAGGAAATACATGAACAGTATTAGAGTCACTTGAGGAAGTTACTA
GGAAACGCCATAAGTCTCCAAGTACATTGTGAGTCATTGAAAGGACAATCGTGTATATA
GACGAAATCTCTACTCGTATGCTTGTGAAATTCTCTAGCAAGTTAGGTTCTATGTTGG
GCTTCTCTATTGTCTAAGAGTATGTGTGACAATTCAACCTGACAAATACCTCAATGG
CAAATTCTGACCTG

```

**Gene Sequence
Structure ***

241 bp

Sequence Deleted

528 bp

**Size of full-length
cDNA: 1752 bp**



FIGURE 2A

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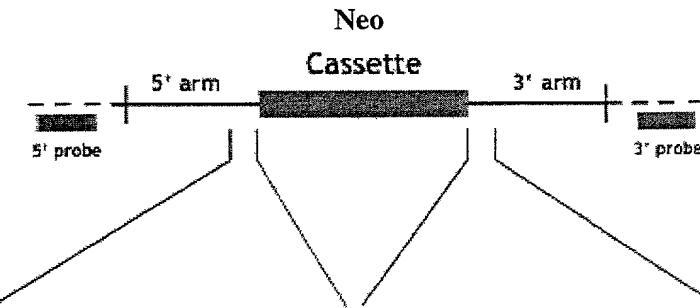
Targeting Vector* (genomic sequence)

Construct Number: 269

Arm Length:

5': 2 kb

3': 1.7 kb



Targeting Vector

Endogenous Locus

* Not drawn to scale

<p>5' > TCCATCTGTGAATCTAACCTC AGTCTCTGGAAATCAGGAAGCATG CATCTCCTCTTAGTTCACTGCTGCTT GTTCTCTTGCTCTGGGAAGGCA GACCTATGTGTGGATGGCTGCCAG AGTCAGGGCTCTTTATCCTTCCT CTCCCAGAAAAGGGGTCCAGAGAT CTCCACGTGGCCAACCACGAGGGAG GCAGAAGACAA<3' (SEQ ID NO: 13)</p>	<p>5' > CCTGCCATCAAAGGCCACGA AGTACACTGGAGACCTGCAGGAC TGTGCCCTCAACCAGGTATGCAT TCTAGAGGGTAAACCACCAGTTG CCAGACAGGGAGGACAGCTGGACA GCTAGGACAAACGGCAAATAGAA AGAGTCTGGCAGAGCTCGGGCCT TGTCTAGTTCCAGATTCAAGTCCTT TGGGTATTCAAT<3' (SEQ ID NO: 14)</p>
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FIGURE 2B

Phenotypic Data Summary - Open Field

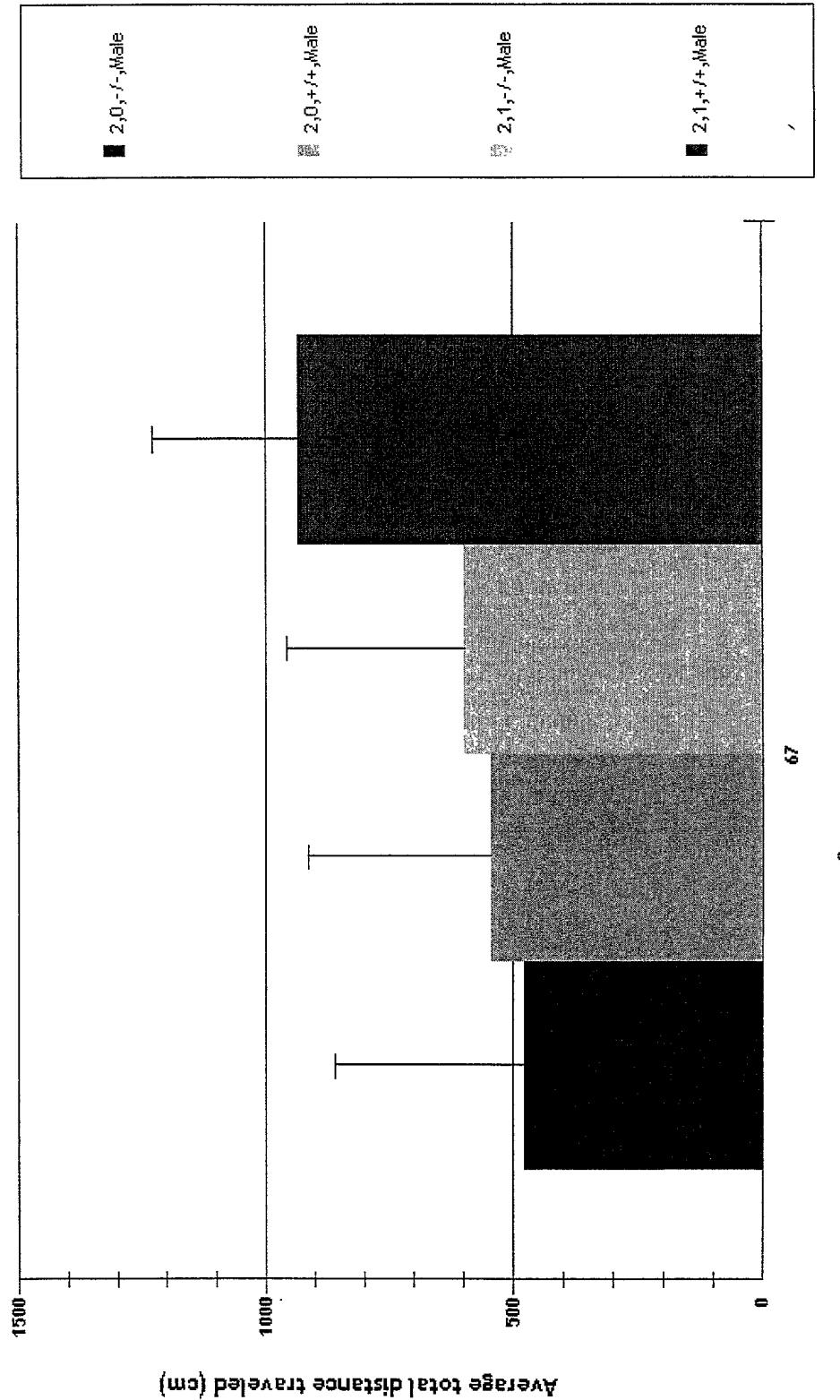


FIGURE 3

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Phenotypic Data Summary - Tail Suspension

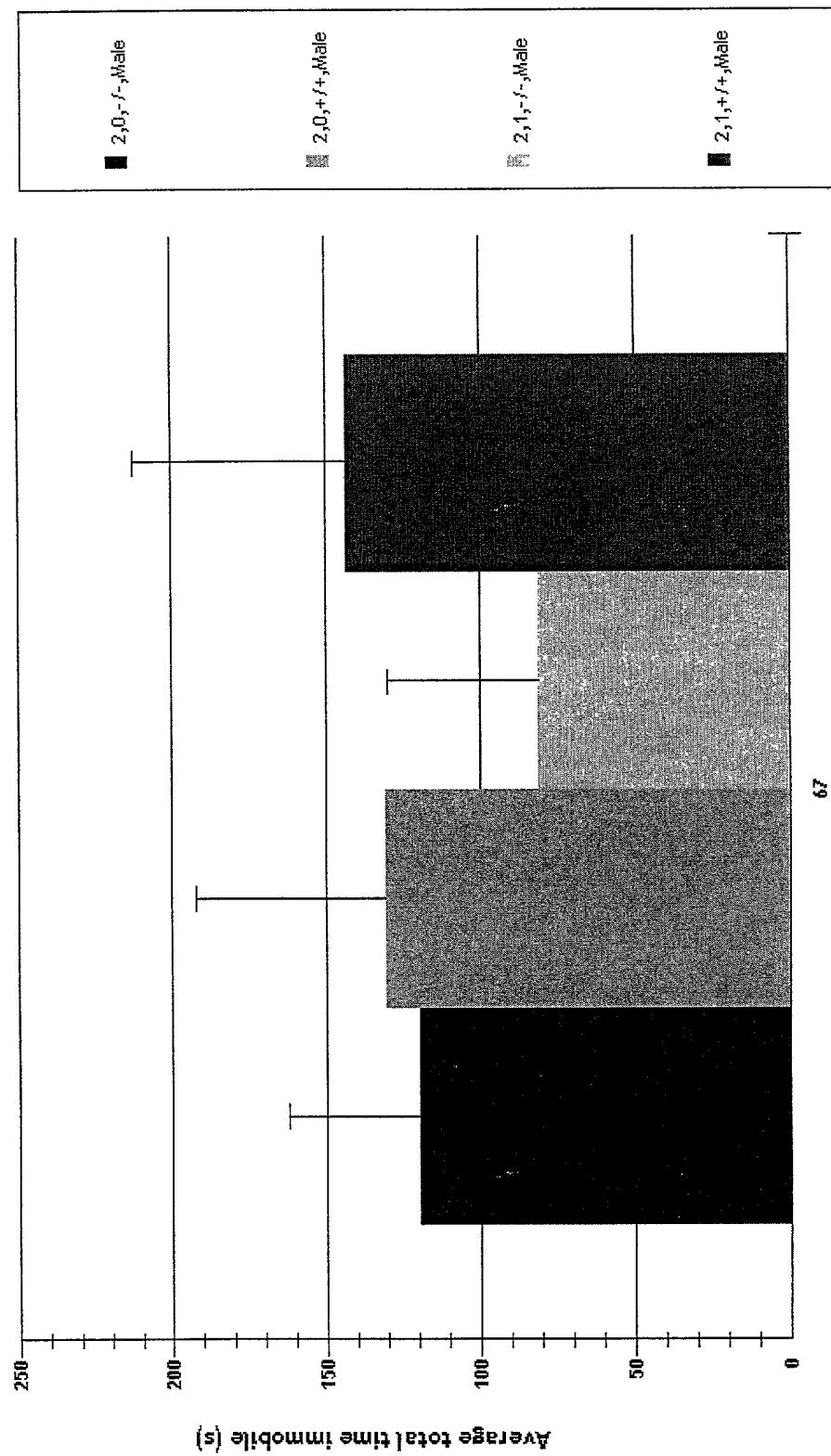


FIGURE 4

Gene

67